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OPINION 185

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OPINION 185.

SUPPRESSION OF BOHADSCH (J. B.), *DE QUIBUSDAM ANIMALIBUS MARINIS*, 1761, AND OF THE GERMAN TRANSLATION THEREOF PUBLISHED BY LESKE (N. G.) IN 1776.

SUMMARY.—Under suspension of the rules Bohadsch (Joannes Baptista), 1761, *De quibusdam Animalibus marinis*, and the German translation thereof published by Leske (Nathaniel Gottfried) in 1776 are hereby suppressed for all nomenclatorial purposes.

I.—THE STATEMENT OF THE CASE.

In 1933 Dr. H. Engel, Conservator, Zoologisch Museum, Amsterdam, submitted to the International Commission a request that the Commission should suspend the rules under their plenary powers for the purpose of suppressing the work published in 1761 by Joannes Baptista Bohadsch under the title *De quibusdam animalibus marinis*. The following is the petition submitted by Dr. Engel :—

ARE THE GENERA AND SPECIES OF BOHADSCH, 1761, TO BE ACCEPTED ?

by

Dr. H. Engel,

Zoologisch Museum, Amsterdam

Joann. Bapt. Bohadsch, Philos. et Med. Doctoris, suae S.C.R.A. Majestatis in Commercialibus Consilarii, in Universitate Pragensi Histor. Natur. Professoris, Facult. Med. Decani, nec non Academiae Botan. Florentinae Sodalis. DE QUIBUSDAM ANIMALIBUS MARINIS, eorumque proprietatibus, orbi litterario vel nondum vel minus notis, Liber cum nonnullis tabulis seri incisus, ab auctore super vivis animalibus delineatis. Dresdae 1761. Apud Georg. Conrad. Walther.

Studying the status of the generic names *Aplysia* and *Tethys*, I found in Pilsbry's paper on this subject ("On the Status of the Names *Aplysia* and *Tethys*," in *Proc. Acad. nat. Sci. Philad.* 1895, pp. 347-350), that Bohadsch's name *fimbria* (first given in the opus cited above, for the Mediterranean Nudibranchiate Mollusc known as *Tethys leporina* L.) had to be rejected, as its author did not use binary nomenclature.¹

¹ At Lisbon in 1935 the Permanent Committee of the International Zoological Congresses referred the question of the meaning of the expression "binary nomenclature" to the Chairman of the Section on Nomenclature of the Twelfth International Congress of Zoology, by whom this question was in turn referred to the International Commission on Zoological Nomenclature for deliberation and report. This invitation was accepted by the International Commission (Lisbon Session, 5th Meeting, Conclusion 3(b)) (for the text of which see 1943, *Bull. zool. Nomencl.* 1 : 45, 55). In accordance with that decision, a report on this subject will therefore be submitted by the International Commission to the International Congress of Zoology at its next meeting. At the present time, therefore, the meaning of the expression "binary nomenclature" is *sub judice*.

In 1926 however O'Donoghue ("A List of the Nudibranchiate Mollusca recorded from the Pacific Coast of North America," in *Trans. R. Canadian Institute*, No. 34, Vol. 15, Pt. 2, p. 226) observed that Bohadsch is not strictly speaking a binominalist, but in his descriptions, as he stated, he was dealing with genera.

This remark led me to the study of the book of Bohadsch, with the aim to make out whether his generic names had to be rejected or had to be accepted. My opinion is that Bohadsch intended to use the rules then newly laid down by Linnaeus in his *Fundamenta Botanica* (and later on explained more explicitly in his *Philosophia Botanica*, 1790, from which I have quoted one of these rules below). The tenth edition of Linné's *Systema Naturae* was received by Bohadsch when his manuscript was ready (as he informs us p. 52). It was in this edition that Linnaeus for the first time consistently used binary nomenclature,² trying to sum up in a specific name the specific characteristics of the animal. Till then this short "diagnosis" consisted of as many (or better, as few) words as were necessary to characterise the species, and so often consisted of two, three or more words. Linné's specific name, most often not sufficing to give a full characteristic of the species, was followed since the said 10th edition by a short diagnosis. Now a difficulty arises when Bohadsch, like other authors of the period, e.g. Müller, *Zool. danic. Prodr.*, gives, as the first word of the short diagnosis, a word that can easily be regarded as the specific name. Often this word is followed by a comma or simply placed apart; it often seems to emancipate itself in a certain sense from the rest of the diagnosis. We may ask, was it the intention of Bohadsch and his colleagues in such cases to regard this first name as the specific name? The answer can be "yes" and "no." Sometimes the animal is designated by its generic name plus the short diagnosis, sometimes by the first word only, followed by "etc.", sometimes again the species are designated by their number (e.g. "altera *Tethyi* species") and lastly in some cases one specific name is given to each species and this name is further used to designate the species. It is my opinion that we must take into account the fact that the authors wanted some time to adapt themselves to Linné's rules. Especially, Bohadsch, who, as said above, got the 10th edition of the *Systema Naturae* while preparing his manuscript for the printer, cannot be expected to use binary nomenclature² as we do it now. It was not yet an iron law to him. But when we see that he often quotes one of Linné's rules and tries to adapt his nomenclature to it, and in many cases uses binary nomenclature as he ought to,² we must forgive him his little transgressions. In any case we cannot neglect the cases where Bohadsch behaves like a good binominalist!

It is only in the monospecific genera that Bohadsch omits the specific designation, thereby following again Linné's rule "*Nomen specificum nullum, speciei in suo genere solitariae, imponi potest*" (I quote from *Phil. Bot.* p. 231).

Our conclusion must be that, although the case is doubtful, there are many reasons to regard Bohadsch's names as valid. If this be done, however, it will lead to "greater confusion than uniformity" and therefore it is proposed that the Commission on Nomenclature shall decide that Bohadsch, 1761, is *not* valid. This seems best, though it were a poor recognition of Bohadsch's eminent zoological work.

In a certain sense the Commission has already given an *Opinion* which, though not intentionally, invalidated one of Bohadsch's generic names. The name *Hydra* Bohadsch, 1761, has priority over *Holothuria* L., 1767, which name was placed in the *Official List*. See *Opinions* 77 and 80, where Bohadsch's name is not mentioned, probably because the appellants regarded him as a non-binominalist. A revision of the case is, happily, not necessary, as *Hydra* Bohadsch, 1761, as preoccupied by *Hydra* L., 1758

² See footnote 1.

(for the Coelenterate genus) and because, as said, the name *Holothuria* L., 1767, was placed in the *Official List*.

In the following I give some quotations from Bohadsch's work, proving that he can be regarded as a binominalist:—

In his *Praefatio* Bohadsch remarks on the third page: "Nam juxta Cl. Linnaeum *sepia* nomen genericum est, sub quo *Polypus*, *loligo* et *sepia* proprie dicta continentur."

In Caput I he describes *Lernaea* (i.e., our Tectibranchiate Mollusc *Aplysia* auct.), and, as Blochmann, in "Die im Golfe von Neapel vorkommenden Aplysien," in *Mitth. a. d. Zool. Stat. z. Neapel*, v. 1884, p. 41, remarks, he used for his description the two Mediterranean species, *A. depilans* auct. and *A. fasciata* auct. In § II (pp. 2–3) Bohadsch discusses the use of the name *Lernaea* (which was given by Linnaeus in the earlier editions of the *Systema Naturae*, including the 9th, Lugduni Batavorum, 1756), in preference to the older name *Lepus marinus*. I quote this paragraph *in extenso*:—"Placuit hocce minus notum animal sub nomine *lernaeae*, quod a Cl. Linnaeo accepit, describere, quam nomen *leporis marini*, quo Veteris illud insignivere, ei adjicere. Idque ideo vel maxime, quia simpliciter *lepus* illud appellare consultum non erat, ne quis crederet, de lepore terrestri me verba facere. Ly[sic] *marinus* vero addere vetat lex a Cl. Linnaeo in fundamentis botanicis sancita, qua nomina generica ex duobus vocabulis integris ac distinctis facta releganda esse statuit. Novum vero nomen ei adjicere pro incongrui habui: cum animal non ignotum, sed imperfecte duntaxat notum naturae curiosus esset, et nomen suum jam haberet. Plura enim nomina eidem rei assignata confusionem pariunt, et memoriam per se labilem inutiliter agravant deteruntque. Unde quemadmodum haecce denominandi libido apud Botanicos minime placet, ita apud Zoologos illam nunquam exoriri plurimum opto. Jam vero ipsam *lernaeae* historiam aggrediar."

So Bohadsch knows the rules laid down by Linnaeus and applies them. As pointed out, we must take into account the fact that they were quite new then, and we cannot expect Bohadsch to regard them as intransgressible laws!

The name *Lernaea* itself was preoccupied by Linné in the 10th edition of the *Systema Naturae*, p. 655, for the well-known parasitic Copepod, as Bohadsch, who in preparing his paper had used the "VIth edition, Parisii 1744" (not mentioned by Linné in the 10th! in his "Ratio Editionis"), notes himself at the end of this first Caput:—"De *Lernaea*." He gives vent to his annoyance over Linné's frivolous handling of names in a more or less sarcastic remark. I quote from pp. 52–53:—"Dum manuscriptum praesentis opusculi Typographo exhibere voluerim, ab eodém Cl. Linnaei decimam systematis naturae (p. 53) editionem accepi. Nolens itaque ut opus quaecumque meum praelo subjiceretur, priusquam dictam systematis editionem perlustrarem, mirabundus in ea conspexi Cl. Virum *Tethyos* nomen *lepori marino* adjecisse, sub *lernaeae* vero nomine *pediculum salmonis* etc. collocasse. Cupiebam primo hocce aspectu nomen meae *lernaeae* permutare, quia vero ex caractere generico *Tethydi* apposito simul intellexi, quod gravissimus Vir neque sub *lernaeae* editionis Parisiensis, neque sub *Tethydis* nomine editionis decimae *leporem marinum* bene noverit; consultis esse censui, assumptum nomen relinquere, et Cl. Linnaeo amatam occasionem concedere; ut in undecima editione alio rursus nomine hocce animal insigneret. Nam *Tethydem* illud haud deinceps appellabit, cum *lernaea mea*, quae proprie *Lepus marinus* Veterum est, in medio nullum *Corpusculum cartilagineum* oblongum habeat, neque *tentaculis cuneiformibus*, minus denique *foveaminibus spirantibus* instructa sit. Ut quidem Cl. Linnaeus ex aliis auctoribus pro caractere generico erronee assumit." So the diagnosis of *Tethys* L., 1758, is wrong! There are more reasons to reject this name and use the well-known name *Aplysia* L., 1767.

In Caput II Bohadsch describes *Fimbria* (i.e., as stated above, the Medi-

terranean Nudibranchiate Mollusc, with the great mouth-veil, known as *Tethys leporina* L.). In §§ VII, VIII and IX, the author discusses this new genus as being quite distinct from the other animals till then united with it under the name *Lepus marinus*. On pp. 62-63 he states:—"Liceat mihi . . . *Fimbriae* . . . ac *lermaeae* . . ., utramque tanquam distinctum Zoophytorum genus proponere," which can only be interpreted as the description of a new genus in the sense of Linnaeus!

If the rules are strictly applied, and if Bohadsch is regarded as valid, this name *Fimbria* has to be used for the said *Tethys leporina* auctorum. According to *Opinion* 46 we get the name of the species by tautonymy, *Fimbria fimbria*, as O'Donoghue already used it (l.c.).

As I hope that the Commission will give an *Opinion* that the names *Aplysia* and *Tethys*, as they were used by Linnaeus, 1767, have to be placed on the *Official List*, I propose to use the name *Tethys leporina* as it has been used till now by authors in general, pending action upon possible suspension of the rules in this case.

The third animal described by Bohadsch is *Argus* (i.e., our *Platydoris argo*). On p. 65 he quotes Linnaeus: "Quaecunque genere conveniunt, eodem nomine generico designanda sunt. Quaecunque genere differunt, diverso nomine designanda sunt. Nomina generica, quae characterem essentialem vel faciem rei exhibent, optima sunt. Qui novum genus constituit, eidem nomen etiam imponere tenetur," and he continues: "Hae et sexcentae aliae regulae a Cl. Linnaeo (vide Fundamenta ejus Botanica) naturae curiosis praescriptae sunt. His insistent et ego a nemine spero reprehendar, quod nunc describendo animali *Argi*, monstri illius Poetarum centum oculis praediti, nomen imposuerim; quod etsi characterem animalis genericum ex integro non designet, unam saltem ejus notam evidenter denotat . . ." and p. 66:—"Verum quia Cl. Linnaei systema hac in parte potissimum sequor, hic vero nulli animali *argi* nomen adjecerit, spero nullam inde nascituram confusionem, si in ordine *Zoophytorum* novum genus collocetur, quod *argi* nomine insignitum est." And § VI, p. 71:—"Ex hac attamen qualicunque *Argi* historia patet: illum cum nullo Zoophytorum genere a Cl. Linnaeo descripto convenire. Hinc liceat quasdam ejus notas characteristicas sequenti definitione exprimere . . ." He then proceeds to give the reasons why he does not unite this genus with *Limax* nor with *Lermaea*, and he always speaks of *Argus* as a genus.

When a man quotes the rules of Linnaeus, tries to use them, discusses their application, it is my opinion that his work has to be regarded as valid, unless it be invalidated by an *Opinion* of the Commission on Nomenclature.

As Linné's Rules asked no specific name in a monospecific genus, it is quite clear that *Argus argus* is the type-species of the genus *Argus* (which later on, by Bergh, 1877, *Jahrb. d. D. Malakozool. Ges.* iv. p. 73, has been named *Platydoris*). In the case that Bohadsch is valid, the name *Argus* has to replace *Platydoris*. There seems to be no serious objection to this change, as the name *Platydoris* seldom occurs in general zoological literature. The specific name *argus* is in use and only changes its author from Linnaeus to Bohadsch.

Chapter IV deals with *Hydra*. This is the animal now known as *Holothuria tubulosa* Gmelin. The name *Hydra* was used by Linnaeus in the earlier editions of the *Systema Naturae* for animals with "Corpus cylindricum. Tentacula ad circumferentiam capitis" (I quote from the edition of 1756, Lugduni Batavorum, cited in the 10th edition as the 9th *per Gronovium*), which diagnosis was changed in the 10th edition, p. 816, and restricted to the Coelenterate species. As I already remarked, Bohadsch says he used the 6th edition of the *Systema Naturae*, Parisii, 1744 (not mentioned in the "Ratio Editionis" in the 10th edition). As his work was ready, he received the 10th edition and he says, pp. 75-76:—"Cl. vero Linnaeus (vide *Systema Naturae*, edit. VI.) Hydrae nomen nostro *Zoophyto* imposuit, quod quidem nomen genericum est, comprehendens: *Mentulam*

et *polypum paludosum* tanquam species. Meo videre *polypus palustris* proprium genus constituit, et ob singulares suas proprietates, diversamque formam, ad *Hydrum* reducendus non est. Haec enim juxta Cl. Linnaeum (vide *Systema Naturae*, edit. VI.) corpus habet *cylindricum*, *tentacula plura in circumferentia capitis*, qui character optime *Mentulae* Veterum, minime vero omnibus *polyphi palustris* Recentiorum speciebus convenit. Unde optarem, ut sola deinceps *Mentula* et hujus detegendae species *Hydra* nomine intelligerentur. Contrarium tamen huic meo voto Cl. Linnaeum fecisse in systematis naturae editione decima (vide p. 816) observo; qui sub *Hydra* genere varias duntaxat *polyphi paludosi* species locavit, *mentulae* vero marinae in toto systemate animali oblitus est."

We see that here Bohadsch is the good zoologist, who clearly describes a genus *Hydra* for our Sea-Cucumbers and a genus *Polypus* for the Coelenterates. And after describing the genus, Bohadsch, as a good binomialist, gives an enumeration of the species belonging to it (pp. 92-93): "Si corporis magnitudo et colorum varietas in denominandis animalium speciebus locum habeat, sequentes *Hydrae* species enumerari possunt: *Hydra major, ex fusco, albo, et rufescente variegata*; Epipetrum auctorum. *Hydra tota fusca, Hydra minor ex fusco lutea*. Hae quidem et non aliae toto eo tempore, quo Neapoli degebam, in manus meas venerē."

We could criticize the use of a diagnosis the first two words of which constitute the name. But here Linnaeus gave the example. The name *tota-fusca* is printed in two words, but these two are much closer to each other than any of two other following or foregoing words in the book, and we have to regard them as belonging together as long as we regard as valid such specific names as *wyville-thomsoni* or *albo-fusca*, or to use a more closely allied example: *tota-cinerea* (*Muraena*, Forskål, *Descr. Anim.* 1775, p. 22).

As I remarked above, we have, applying the rules, to use *Hydra* L., 1758, for the Coelenterates, as this name antedates *Hydra* Bohadsch, 1761. Further, *Opinion* 80 places *Holothuria* L., 1767, on the *Official List* for the sea-cucumbers. So this case gives no more difficulties as regards the generic names involved.

But the specific names used by Bohadsch—*major*, *tota-fusca*, and *minor*—have to be used, if Bohadsch is valid and if these species can be identified. In the 12th edition Linnaeus, p. 1090, quotes:—"Bohadsch, Mar. 75, t. 6 *Hydra*" under "*Holothuria tremula*," together with "Gunn. Act. Stockh. 1767," "Habitat in Oceano Norvegico," while Bohadsch clearly stated that he fished his animals near Naples! In the 13th edition, Gmelin (p. 3138) names the animal of Gunnerus: *Holothuria frondosa*, while the *Holothuria tremula* L., 1758, is united with many other quotations, and with "Bohadsch anim. mar. p. 75, t. 6 et t. 7 f. 1-5 *Hydra*," under *Holothuria tubulosa*, which name has since then been used. It is not easy to make out if the three species of Bohadsch correspond to three different species of the Neapolitan coasts, but it seems most probable that they all three belonged to the species known as *H. tubulosa* (cf., for example, Koehler, 'Les échinodermes des mers d'Europe,' ii. Doin, Paris, 1927, pp. 231-234). So if Bohadsch is regarded as valid, the rules ask us to change the well-known name *Holothuria tubulosa* Gmelin, 1791, to *Holothuria major* Bohadsch, 1761.

Caput V describes the genus *Syrinx* (i.e., our *Sipunculus*, and the species Bohadsch examined was *nudus* L. 1767, p. 1078). Here again we have the description of a genus as Bohadsch clearly states (p. 96: "novum genus ex eo creaverim" and p. 97: "novum *Zoophytorum* genus"). But as it is a monospecific genus, Bohadsch gives only one name. If Bohadsch is regarded as valid, and the rules are strictly applied our well-known *Sipunculus nudus* L., 1767 has to receive the name *Syrinx syrinx* Bohadsch, 1761.

The next, Caput VI, gives a description of the genus *Penna*, now known as *Pennatula* L., 1758 (p. 818). Bohadsch prefers the name *Penna*, because he sees no reason for Linné's diminutive *Pennatula*. From his § II, p. 100,

we may again quote a passage in favour of our standpoint:—"Quum plures *Pennae* species curiosorum oculis praeponere possim, necessum est, et quidem contra receptum ordinem, characterem ejus genericum vel generalem definitionem praemittere." And as the species belonging to this genus he names: "*Penna rubra, pennis falciformibus, tentaculis in pinnarum facie concava positis. Seu Penna stirpe rachi utrinque pennato. Vel Penna Phosphorea* Linn. (Syst. Nat. edit. 10, p. 818). *Penna grisea, pennis convexo planis tentaculis in pinnarum facie convexa positis. Penna rubescens, pennis carens, tentaculis in corporis trunco positis, Penna ramosa, pennis carens tentaculis in ramis positis.*"

The first of these species, *Penna rubra*, is a synonym of *P. phosphorea* L., 1758, as Bohadsch himself informs us, and, like the generic name *Penna*, it is invalidated by Linnaeus, 1758. *Penna grisea* was cited by Pallas, 1766,³ in his 'Elenchus zoophytorum,' p. 367, as *P. grysea* and from thence passed under that name (*P. grisea*) in literature. It is now known as *Pteroides grisea*. The third species, *P. rubescens*, is known as *Funiculina quadrangularis*; the trivial name was given by Pallas (l.c. p. 372). It is difficult to decide whether Bohadsch proposed (p. 101) *rubescens* as a specific name! He gives a short diagnosis there (cited above) of which the first word is *rubescens*. In the description of this species (p. 112 seq.) he only says:—"cum lingua vernacula *Penna del pesce pavone* illam vocitent." This seems to be a point against Bohadsch's binominalism! He does not definitely propose a name, neither does he use the first word of the diagnosis in the further description! It may be a point of discussion whether this species has to be called *P. rubescens* Bohadsch or keep its well-known name *P. quadrangularis* Pallas. The fourth species is described by Pallas (l.c. p. 349) as *Alcyonium palmatum*. He quotes the short diagnosis of Bohadsch which we quoted above. Again; here we may ask whether the first word of Bohadsch's diagnosis (*ramosa*) has to be regarded as the specific name? In the description of the animal he says, p. 114:—"a me vero *Penna ramosa, pennis carens, tentaculis in ramis positis* appellatur," and p. 117 he says:—"quartam *Pennae* speciem seu *manum marinam*." So, like the third species, the fourth forms a point of doubt against Bohadsch's binominalism.

The last chapter, VII, deals with the genus *Tethyum* being a synonym of *Ascidia* Linnaeus, ed. xii. 1767, p. 1087. Bohadsch discusses the name *Tethyum*, gives a generic diagnosis, and then names the following species (p. 130):—" *T. vulgare, coriaceum, gelatinosum, membranaceum*." In § II, he describes *Tethyum coriaceum*, in § III *Tethyum gelatinosum*, and in § IV *Tethyum membranaceum*, which he there proposes to call *T. fasciculatum*, under which name he already mentioned it on p. 78.

Linnaeus in the 12th edition, p. 1087, mentions under *Ascidia* six species, of which the first three are founded on the three species described by Bohadsch. The first, *T. coriaceum* Bohadsch, he names *Ascidia papillosum*, the second *Ascidia gelatinosum*, which is *T. gelatinosum* Bohadsch, and the third, *Ascidia intestinalis*, is identified with *T. fasciculatum* Bohadsch. The last species Linnaeus regards as synonym of "Baster, subs. 2, p. 84, 6 10. f. 5?" and "Act. nidros,* iii. p. 81, t. 3. f. 3, 4. *Tethyum*" and probably, therefore, gives: "Habitat in Oceano Europaeo," though Bohadsch found his animal at Naples.

Gmelin, in the 13th edition (p. 3123), copies this all, omits the point of interrogation after Baster, and under his 13th species *canina* (p. 3125), he again quotes "Bohadsch anim. mar. p. 132, t. 10. f. 4, 5. *Tethyum fasciculatum*," a somewhat careless proceeding; but, in fact, he was right, for, as Hartmeyer, in Bronn's 'Klassen und Ordnungen' (1908), informs us (p. 1414), the two species *A. intestinalis* and *A. canina* are identical and are now known as *Ciona intestinalis* (L.).

* = Det Tronghjemske Selskabs Skrifter, iii. (1765).

³ This species was cited by Pallas as *Pennatula grysea*.

In 1908 Hartmeyer published in the *Zoologische Annalen*, iii. pp. 1-63, "Zur Terminologie der Familien und Gattungen der Ascidien," and there he gives (p. 9) a chronological history of the names, and on p. 10 he says of our Bohadsch's name *Tethyum*: "Es kann kein Zweifel darüber obwalten, dass dieser Gattungsname durchaus im Sinne der binären Nomenklatur gebildet ist und demnach zu Recht bestehen bleibt." Then he deals with the history of the name *Tethyum* and how it is divided in different genera, till (p. 13) he comes to the conclusion that it is (after elimination of the other species) used for *T. rusticum* and *T. quadridentatum* of Linnaeus, 1767. These belong to the genus *Styela* Fleming, 1822. Accordingly, Hartmeyer used in his edition of Bronn, 1908, p. 1357, the name *Tethyum* for Fleming's *Styela*. Later on, preparing Apstein's "List of Nomina conservanda" (*Sitz. Ber. Ges. Naturf. Freund. Berlin*, no. 5, Mai 1915), he replaces this name again by *Styela* Fleming, 1822. In his "Ascidiarum Nomina Conservanda" (in *ibidem*, Jahrg. 1915, no. 6) he says no more about this.

If Bohadsch is valid, the name *Tethyum* must be used for one of his three species. If the first is chosen it has to replace *Halocynthia* Verrill, 1879, if the third is chosen (because the binary use of the second is doubtful) it has to replace the well-known *Ciona* Fleming, 1822. Such a change were the more to be regretted, as *Tethya* is a well-known genus of Sponges!

The three species of Bohadsch are now bearing the following names:—*T. coriaceum* = *Halocynthia papillosa* (L.); *T. gelatinosum* = perhaps identical with *Phallusia mentula* (Müll.), 1776; *T. fasciculatum* = *Ciona intestinalis* (L.).

As we remarked above, Bohadsch first designated the first species as *T. coriaceum*, *asperum*, *coccineum*, *organorum orificiis setis exiguis munitis*. In the description in § II he speaks of the species "*T. coriaceum*, etc." The second species is first designated in the same way, later on (§ III) he speaks of "*altera Tethyi* species." The third species is like the others, first designated with a short diagnosis, which begins with "*T. membranaceum*," but later on (§ IV, p. 132) he says:—"Unde *Tethyum fasciculatum* non inepte diceretur." So, be it that in his designation of the first two species Bohadsch seems to be no binomialist, we will have to replace the well-known name *Ciona intestinalis* by *Tethyum fasciculatum* Bohadsch, if the Commission is of the opinion that Bohadsch's names are valid.

So our conclusion is that in many of the cases considered Bohadsch's names may be regarded as valid. But, since the change involved would result in greater confusion than uniformity, it is proposed to the Commission on Nomenclature to declare Bohadsch's names invalid.

Summary.

If Bohadsch is regarded as valid:—

- Fimbria fimbria* Boh. has to replace *Tethys leporina* L. auctorum.
- Argus argus* Boh. has to replace *Platydoris argo* (L.) auctorum.
- Holothuria major* Boh. has to replace *Holothuria tubulosa* Gmel. auctorum.
- Syrinx syrinx* Boh. has to replace *Sipunculus nudus* L. auctorum.
- Pteroides grisea* (Boh.) has to replace *Pteroides grisea* (Pallas) auctorum.
- Perhaps *F. rubescens* (Boh.) has to replace *Funiculina quadrangularis* (Pall.) auctorum.
- Perhaps *Alcyonium ramosus* (Boh.) has to replace *Alcyonium palmatum* Pall. auctorum.
- Tethyum* Boh. has to replace *Halocynthia* Verrill or *Ciona* Fleming.
- Perhaps *Tethyum coriaceum* Boh. has to replace *Halocynthia papillosa* (L.) auctorum.
- Tethyum fasciculatum* Boh. has to replace *Ciona intestinalis* (L.) auctorum.

This would include the change of so many old and well-known names that "greater confusion than uniformity" would ensue. So an *Opinion* is asked declaring Bohadsch's names invalid.

II.—THE SUBSEQUENT HISTORY OF THE CASE.

2. Owing to the length of the petition submitted by Dr. Engel, the resources then at the disposal of the Commission were not sufficient to permit of the reproduction of copies for distribution to each member of the Commission.⁴ Accordingly arrangements were made for Dr. Engel's petition to be published,⁵ so that thereby his proposals might be made accessible for study. As soon as separates of Dr. Engel's paper were available (June 1935), such copies as were supplied were distributed to the members of the Commission for consideration.

3. Both the original edition of Bohadsch's work published in 1761 and also Leske's German translation published in 1776 were examined in the spring of 1936 by Commissioner C. W. Stiles (then Acting Secretary to the Commission). In the same period Commissioner Stiles conferred by correspondence with the President of the Commission (Commissioner Karl Jordan) in regard to this case and also with Commissioner James L. Peters. Commissioner Stiles discussed it also with Dr. Henry A. Pilsbry, Curator, Department of Mollusks and Marine Invertebrates, Academy of Natural Sciences of Philadelphia, and with Dr. Paul Bartsch, Curator of Mollusks and Cenozoic Invertebrates, United States National Museum, Washington. In the light of these discussions, Dr. Stiles prepared the following note which in June 1936 he circulated for the consideration of members of the Commission :—

Both the original of 1761 and the translation by Leske, 1776, have been examined by the Acting Secretary and this examination leaves no doubt in the mind of the Acting Secretary that Bohadsch considers that he is dealing with genera in the Linnean sense, as becomes especially clear from his discussion on p. 53 of the 1761 edition.

As Engel points out, this work appeared in the transitional period between polynomial and binomial nomenclature.

The conclusion of the Acting Secretary is that it is difficult to deny that Bohadsch recognizes a binary⁶ (not clearly binomial) system, but that the work is certainly not consistently binomial and that, if adopted under the rules, it will furnish a distinct possibility for long and expensive discussions, the ultimate outcome of which is exceedingly doubtful and will result in much confusion.

⁴ This type of difficulty will fortunately not recur in view of the decision of the Commission to establish its own journal, the *Bulletin of Zoological Nomenclature*, in which in future all proposals submitted to the Commission will be published.

⁵ Dr. Engel's petition was published in May 1934, *Ann. Mag. nat. Hist.* (10) **13**: 529-540.

⁶ See footnote 1.

Accordingly, on the foregoing premise, the Acting Secretary recommends that the rules be suspended, and that Bohadsch, 1761, and 1776, be excluded from all consideration, under the rules, on the ground that its adoption will produce greater confusion than uniformity.

4. At the same time Commissioner Stiles circulated to members of the Commission voting papers in favour of the adoption of an *Opinion* in the sense indicated in his note quoted above.

5. In July 1936, this case was duly advertised in the manner prescribed in proviso (a) to Article 1 of the Plenary Powers Resolution⁷ adopted by the Ninth International Congress of Zoology at its meeting held at Monaco in March 1913.

6. By September 1936 a sufficient number of affirmative votes had been received to secure the adoption by the Commission of the proposed *Opinion*, provided that the advertisement referred to in the preceding paragraph did not evoke any serious objection to that course.

7. The only Commissioner to add any observations when recording his vote on this case was Commissioner Francis Hemming, who wrote:—

I have examined, jointly with Commissioners Jordan and Calman, the copy of Bohadsch's *De quibusdam Animalibus marinis* in the library of the British Museum and I have no doubt that, although Bohadsch was not a strictly binominal author in this work, he did endeavour to follow the rules of nomenclature enjoined by the Linnean system. Whether in this work Bohadsch can be considered as having applied "the principles of binary nomenclature" within the meaning of Article 25 of the International Code must remain a matter of doubt until, on the presentation of the report which the International Commission have been requested to furnish, the Thirteenth International Congress of Zoology reaches a final and authoritative decision as to the meaning to be attached to the term "binary nomenclature."⁸ Fortunately, these doubts as to the status of Bohadsch's work in no way prevent the use by the International Commission of their plenary powers for the purpose of directing that it is to be suppressed for all nomenclatorial purposes; for such a decision in no way prejudices the question whether, apart from the use of the Commission's plenary powers, this book would or would not be available under the Code.

I consider that Dr. Engel has established a case for the complete suppression of Bohadsch's book for all nomenclatorial purposes and I accordingly vote in favour of the proposed *Opinion*. If this *Opinion* is adopted by the Commission, the effect will be to place the *De quibusdam Animalibus* in the same position as that in which the so-called "Erlangen List" was placed by the decision taken by the Commission at Lisbon (Lisbon Session, 2nd Meeting, Conclusion 13)⁹ that is to say that, where any subsequent author published a genus having the same name as one of the genera proposed in Bohadsch's work, the later published name is not to be rejected

⁷ See Declaration 5. (See 1943, *Opinions and Declarations rendered by International Commission on Zoological Nomenclature* 1: 31-40.)

⁸ See footnote 1.

⁹ For the text of this Conclusion, see 1943, *Bull. zool. Nomencl.* 1: 13-14.

as a homonym by reason of the earlier publication of that name in the *De quibusdam Animalibus*.¹⁰

8. No communication of any kind objecting to the suspension of the rules for the purpose of suppressing Bohadsch's *De quibusdam Animalibus* was received by the Commission within the prescribed period of twelve months following the issue of the advertisement required under the Plenary Powers Resolution. That period expired on 31st July 1937. Accordingly, on 30th November 1937, Commissioner Hemming, Secretary to the Commission, acting in virtue of the power conferred upon him in that behalf by Article 7 of the By-Laws, closed the ballot in this case.

III.—THE CONCLUSION REACHED BY THE INTERNATIONAL COMMISSION.

9. The decision taken by the Commission in the present case is :—

under suspension of the rules to suppress Bohadsch (Joannes Baptista), 1761, *De quibusdam Animalibus marinis*, and the German translation thereof published by Leske (Nathaniel Gottfried) in 1776.

10. The following twelve (12) Commissioners voted in favour of the present *Opinion* :—

do Amaral; Calman; Chapman; Esaki; Fantham; Hemming; Jordan; Peters; Richter; Silvestri; Stiles; and Stone.

11. No Commissioner voted against the present *Opinion*.

12. The following six (6) Commissioners did not vote on the present *Opinion* :—

Arndt; Bolivar y Pieltain; Cabrera; von Hankó; Pellegrin; and Stejneger.

IV.—AUTHORITY FOR THE ISSUE OF THE PRESENT OPINION.

WHEREAS the Ninth International Congress of Zoology at its meeting held at Monaco in March 1913, adopted a Resolution conferring upon the International Commission on Zoological Nomenclature, acting for the International Congress of Zoology, Plenary Power to suspend the rules as applied to any given case,

¹⁰ See *Opinion* 145 (See 1943, *Opinions and Declarations rendered by International Commission on Zoological Nomenclature* 2 : 99-108).

where, in the judgment of the Commission, the strict application of the said rules would clearly result in greater confusion than uniformity, provided that not less than one year's notice of the possible suspension of the rules as applied to the said case should be given in two or more of five journals named in the said Resolution and provided that the vote in the Commission was unanimously in favour of the proposed suspension of the rules; and

WHEREAS the suspension of the rules is required to give valid force to the provisions of the present *Opinion*; and

WHEREAS not less than one year's notice of the possible suspension of the rules as applied to the present case has been given to two or more of the journals referred to in the Resolution adopted by the Ninth International Congress of Zoology at its meeting held at Monaco in March 1913; and

WHEREAS the vote in the Commission on the present case was unanimously in favour of the issue of an *Opinion* in the terms of the present *Opinion* :

NOW, THEREFORE,

I, FRANCIS HEMMING, Secretary to the International Commission on Zoological Nomenclature, acting in virtue of all and every the powers conferred upon me in that behalf by reason of holding the said Office of Secretary to the International Commission, hereby announce the said *Opinion* on behalf of the International Commission, acting for the International Congress of Zoology, and direct that it be rendered and printed as *Opinion* Number One Hundred and Eighty Five (*Opinion* 185) of the said Commission.

In faith whereof I, the undersigned FRANCIS HEMMING, Secretary to the International Commission on Zoological Nomenclature, have signed the present *Opinion*.

DONE in London, this seventeenth day of July, Nineteen Hundred and Forty Four, in a single copy, which shall remain deposited in the archives of the International Commission on Zoological Nomenclature.

*Secretary to the International Commission
on Zoological Nomenclature.*

FRANCIS HEMMING